

WHAT IS CLAIMED IS:

1. An edge-light type backlight system comprising:

a light guide panel including a light incident surface into which light enters and a light emitting surface from which light is emitted;

a rod-shaped light source which projects light to the light incident surface; and

a polyhedral optical deflector including a first surface and a second surface, the first surface and the second surface on opposite sides of a normal line orthogonal to the light incident surface and being more distant from each other as distance from the light incident surface increases,

wherein the optical deflector is disposed on at least one of the light emitting surface and a surface opposite to the light emitting surface.

2. The edge-light type backlight system of claim 1, wherein a plurality of optical deflectors are arranged along the light incident surface.

3. The edge-light type backlight system of claim 1, wherein the optical deflector has the same refractive index as the light guide panel.

4. The edge-light type backlight system of claim 1, wherein the optical deflector is integrally formed with the light guide panel.

5. The edge-light type backlight system of claim 1, wherein the first surface and the second surface are symmetrical about the normal line orthogonal to the light incident surface.

6. The edge-light type backlight system of claim 1, wherein the first surface and the second surface are extended up to a surface opposite to the light incident surface.

7. The edge-light type backlight system of claim 1, wherein the optical deflector further includes a third surface opposing the light emitting surface, and the third surface is parallel to the light emitting surface.

8. The edge-light type backlight system of claim 1, wherein a cross-section of the optical deflector in parallel to the light emitting surface is in the shape of a triangle whose oblique sides are the first and second surfaces and bottom side is opposite to the light incident surface.

9. The edge-light type backlight system of claim 1, wherein a cross-section of the optical deflector in parallel to the light emitting surface is in the shape of a trapezoid whose oblique sides are the first and second surfaces and bottom surface is opposite to the light incident surface.

10. A light guide panel of an edge-light type backlight system using a rod-shaped light source, the light guide panel comprising:

a light incident surface into which light enters;

a light emitting surface from which light is emitted; and

an optical deflector protruding from at least one of the light emitting surface and a surface opposite to the light emitting surface, a cross-section of the optical deflector in parallel to the light emitting surface being in the shape of a triangle whose bottom side is a surface opposite to the light incident surface, the triangular cross-section being extended in a direction perpendicular to the light emitting surface.

11. The light guide panel of claim 10, wherein a plurality of optical deflectors are arranged along the light incident surface.

12. The light guide panel of claim 10, wherein a cross-section of the optical deflector in parallel to the light emitting surface is in the shape of an isosceles triangle.

13. The light guide panel of claim 10, wherein the optical deflector further includes a third surface opposing the light emitting surface, and the third surface is parallel to the light emitting surface.

14. The light guide panel of claim 10, wherein the optical deflector is extended up to a surface opposite to the light incident surface.

15. A light guide panel of an edge-light type backlight system using a rod-shaped light source, the light guide panel comprising:

a light incident surface into which light enters;

a light emitting surface from which light is emitted; and

an optical deflector protruding from at least one of the light emitting surface and a surface opposite to the light emitting surface, a cross-section of the optical deflector in parallel to the light emitting surface being in the shape of a trapezoid whose bottom side is a surface opposite to the light incident surface, the trapezoid-shaped cross-section being extended in a direction perpendicular to the light emitting surface.

16. The light guide panel of claim 15, wherein a plurality of optical deflectors are arranged along the light incident surface.

17. The light guide panel of claim 15, wherein a cross-section of the optical deflector in parallel to the light emitting surface is in the shape of an isosceles trapezoid.

18. The light guide panel of claim 15, wherein the optical deflector further includes a third surface opposing the light emitting surface, and the third surface is parallel to the light emitting surface.

19. The light guide panel of claim 15, wherein the optical deflector is extended up to a surface opposite to the light incident surface.